VIII

IN REPLY REFER TO
3100
(U-603)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Moab District
Grand Resource Area
P.O. Box M
Moab, Utah 84532

March 7, 1980

Mr. M. L. Freeman
Staff Production Analyst
Tenneco Oil
Penthouse
720 South Colorado Blvd.
Denver, CO 80222

Reference: Staking Request
Hamel 1-16, Lease U-33106
SE/SE Section 1
T. 18 S., R. 23 E., SLB&M
Grand County, Utah

Dear Mr. Freeman:

This office has no objections to staking the above referenced locations.

An archaeological clearance must be obtained after staking the site(s).

A road right-of-way should be filed from the nearest county road to your lease with the BLM.

Sincerely yours,

C. Delano Backus

C. Delano Backus
Area Manager

Enclosure:
Archaeologist List

cc:
Ed Guynn

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

IX

NICKENS and ASSOCIATES
P.O. Box 727
Montrose, Colorado 81401
Phone: (303) 249-3411

June 2, 1980

Mr. M. L. Freeman
Tenneco Corporation
720 South Colorado Boulevard
Denver, CO 80222

RE: Hamel 1-16 well location,
Grand County, Utah

Dear Mr. Freeman:

Our personnel have completed a cultural resource survey for the relocation of Tenneco Hamel 1-16 in Grand County, Utah. No prehistoric or historic cultural resources were encountered at the new location nor along the 200 feet of new road, and cultural resource clearance has been recommended.

A copy of the BLM-required Summary Report is attached; copies have been forwarded to the appropriate BLM and U.S. Geological Survey offices. An invoice covering this inspection is also enclosed.

We appreciate the opportunity to serve Tenneco; please contact me if we may be of assistance in the future.

Sincerely,

Paul R. Nickens

Paul R. Nickens, Ph.D.
Principal Investigator

PRN/j
Enclosures

cc: BLM Grand Resource Area Office
BLM Moab District Office
BLM Utah State Office
U.S. Geological Survey

IN REPLY REFER TO
3100
(U-603)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Moab District
Grand Resource Area
P. O. Box M
Moab, Utah 84532

July 14, 1980

Memorandum

To: Oil & Gas Office, USGS Conservation Division,
P.O. Box 3768, Grand Jct., CO 81501
From: Area Manager, Grand

Subject: Tenneco Oil Co.
Birch 1-16
Section 1, T. 18 S., R. 23 E.
Grand County, Utah

On July 8, 1980, a representative from this office met with John Connors, USGS, and Lee Freeman agent of Tenneco Oil Company for an inspection of the above referenced location. Subject to the attached conditions, I am approving the surface management portion of the Application for Permit to Drill.

The archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to Tenneco Oil Company.

Gregg R. Stevenson
ACTING

Enclosures (2)
1-Reclamation Procedures
2-Seed Mixture

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

JUL 21 RECD

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Tenneco Oil Company

3. ADDRESS OF OPERATOR: 720 So. Colorado Blvd., Denver, Colorado 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 712.2 FSL, 1425.8 FEL (1426' FEL) SWSE
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: U33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Sulphur Canyon

8. FARM OR LEASE NAME: Birch (old name Hamel)

9. WELL NO.: 1-16

10. FIELD AND POOL, OR WILDCAT: Wildcat/Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T18S, R23E

12. COUNTY OR PARISH: Grand

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 16 miles northwest of Westwater, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 967.00

16. NO. OF ACRES IN LEASE: 967.00

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 5325

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5555.4' GR

22. APPROX. DATE WORK WILL START*: June/July 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 3/4"	7" new	23# K55	±1150'	Circulate to surface
6 1/4"	4 1/2" new	10.5# K55	±5325'	Cover all possible productive zones.

Set 1-3 joints 9 5/8" casing as conductor pipe.

DIVISION OF OIL, GAS & MINING

JAN 30 1981

RECEIVED

See Attached.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 1-30-81
BY: M. J. Minder

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED M. L. Freeman TITLE Staff Production Analyst DATE June 19, 1980

M. L. Freeman

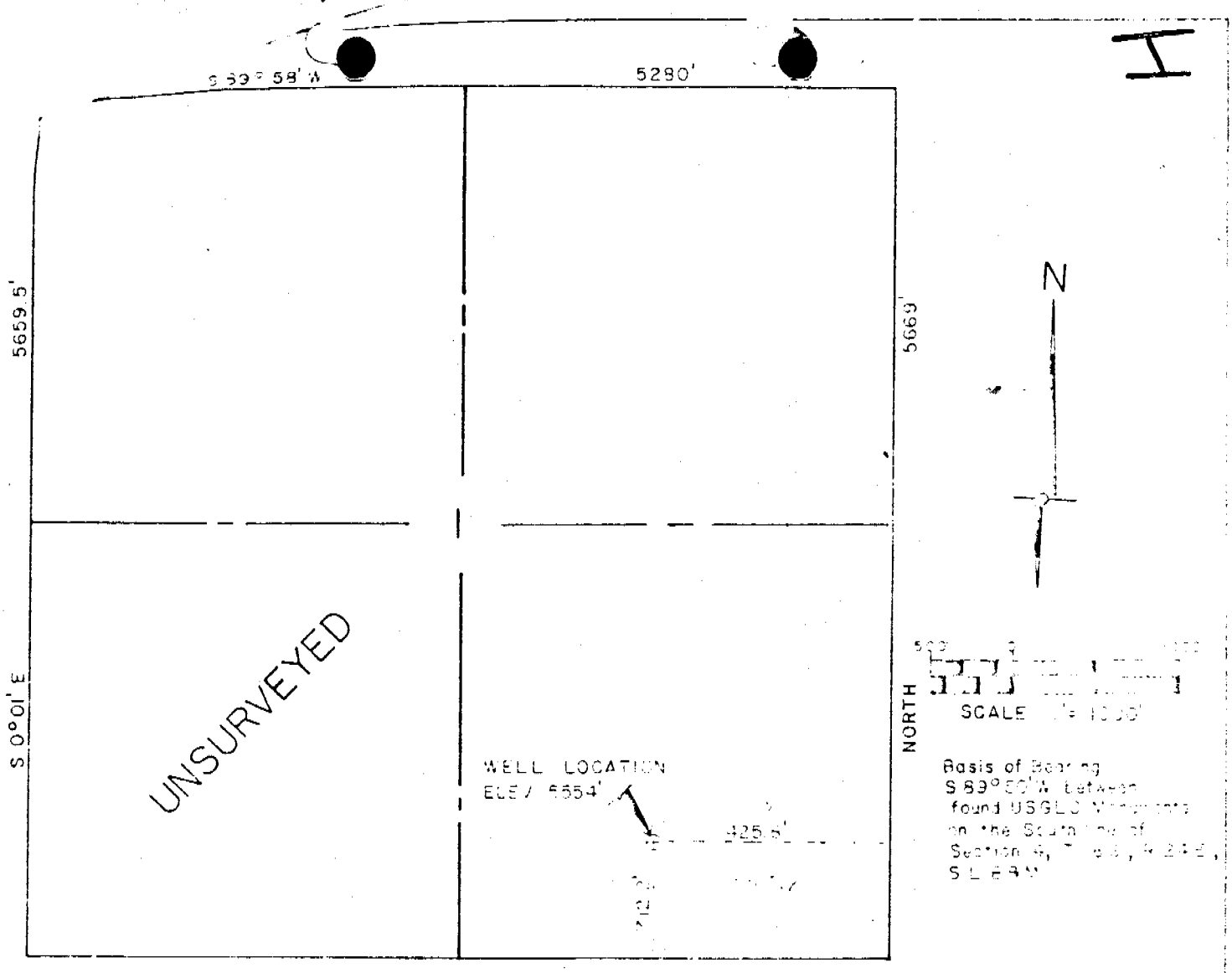
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



I

WELL LOCATION

712.2 FT. N.S.L., 1425.8 FT. W.E.L.
SECTION 1, T. 18 S., R. 23 E., S.L.B.&M. SWSE
GRAND COUNTY, UTAH

SURVEYOR'S CERTIFICATE

I, Edward A. Armstrong, a registered land surveyor in the State of Utah do hereby certify that this survey was made under my direct supervision and that this plat represents said survey.

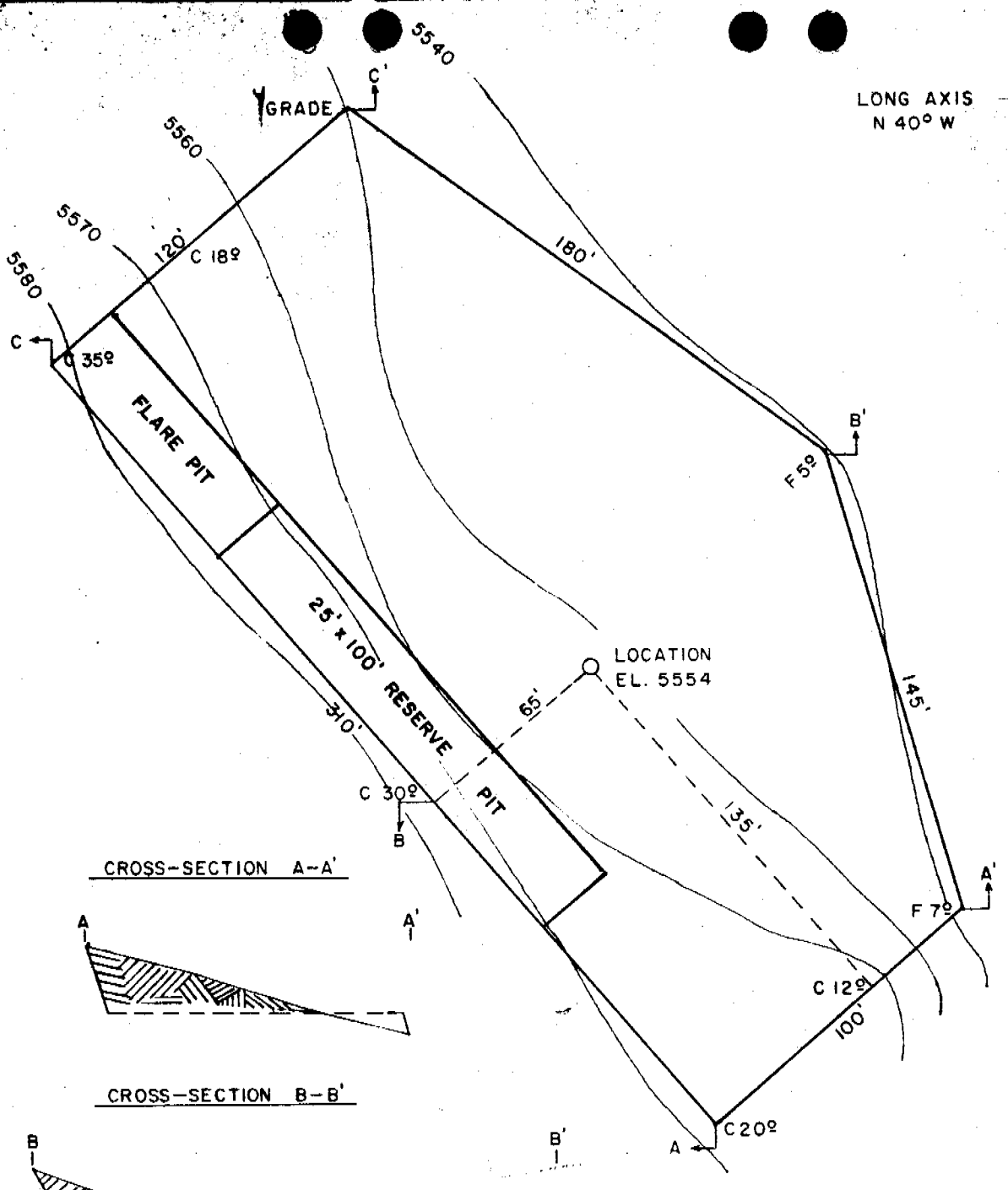
EDWARD A. ARMSTRONG P.E. & L.S. 4464

REVISED
LOCATION

ARMSTRONG ENGINEERS and ASSOCIATES, INC.
ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING
861 ROOD AVENUE – GRAND JUNCTION, COLORADO 81501 – (303) 245-7221

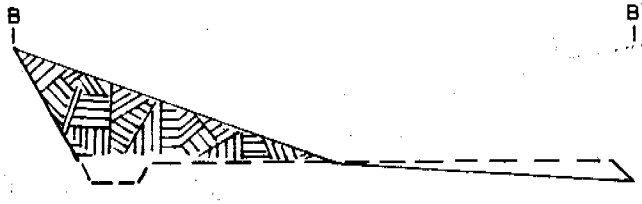
SCALE 1" = 1000'	TENNECO OIL
DATE 6/5/80	
DRAWN LHS	
CHECKED FAA	SHEET 1 of 1
JOB NO. 6/5/80	

II

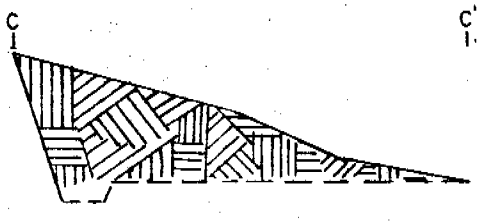


CROSS-SECTION A-A'

CROSS-SECTION B-B'



CROSS-SECTION C-C'



REF. PT. 200' N. ELEV.= 5543'
REF. PT. 200' E. ELEV.= 5549'

APPROXIMATE
EARTHWORK VOLUMES

CUT: 14,970 CU. YD.
FILL: 1,520 CU. YD.

ARMSTRONG ENGINEERS and ASSOCIATES, INC.
ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING
861 ROOD AVENUE – GRAND JUNCTION, COLORADO 81501 – (303) 245-3861

SCALE	1" = 50'
DATE	6/5/80
DRAWN BY	LHS
CHECKED BY	EAA
DATE OF SURVEY	6/3/80

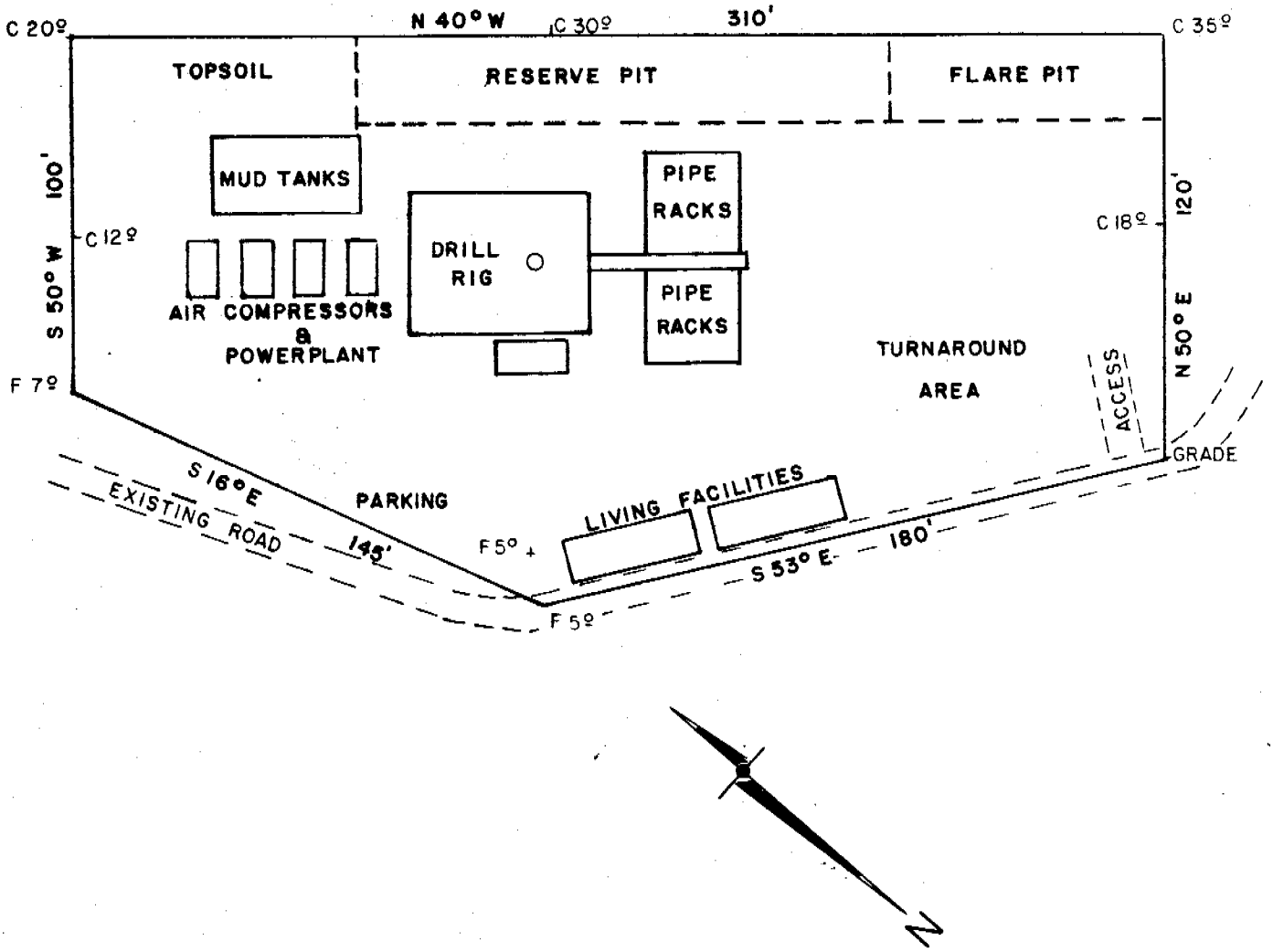
TENNECO OIL
HAMEL– USA 1-16

SHEET 2 of 5

JOB NUMBER 802738

III

RIG LAYOUT



REVISED LOCATION

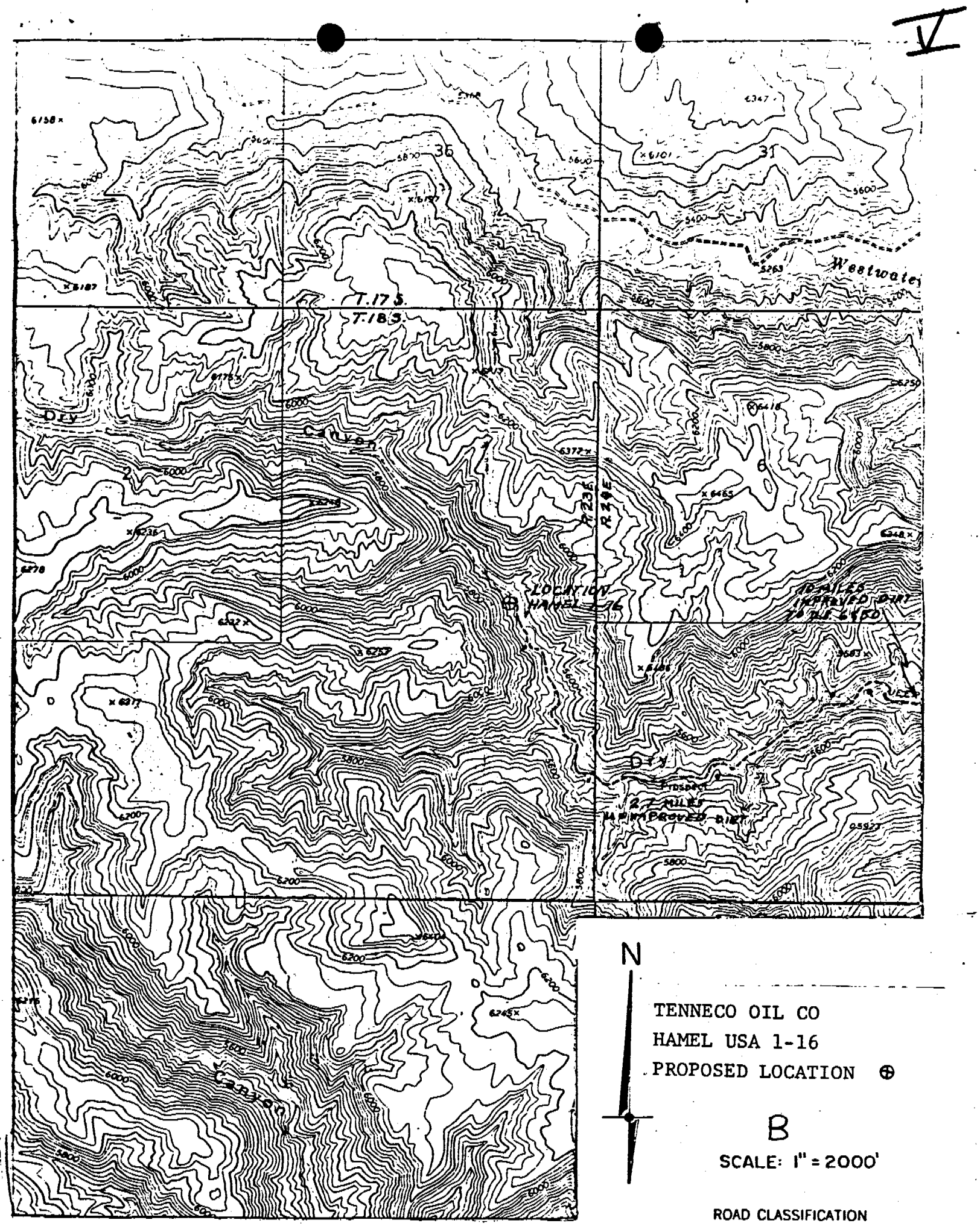
ARMSTRONG ENGINEERS and ASSOCIATES, INC.
ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING
861 ROOD AVENUE – GRAND JUNCTION, COLORADO 81501 – (303) 245-3861

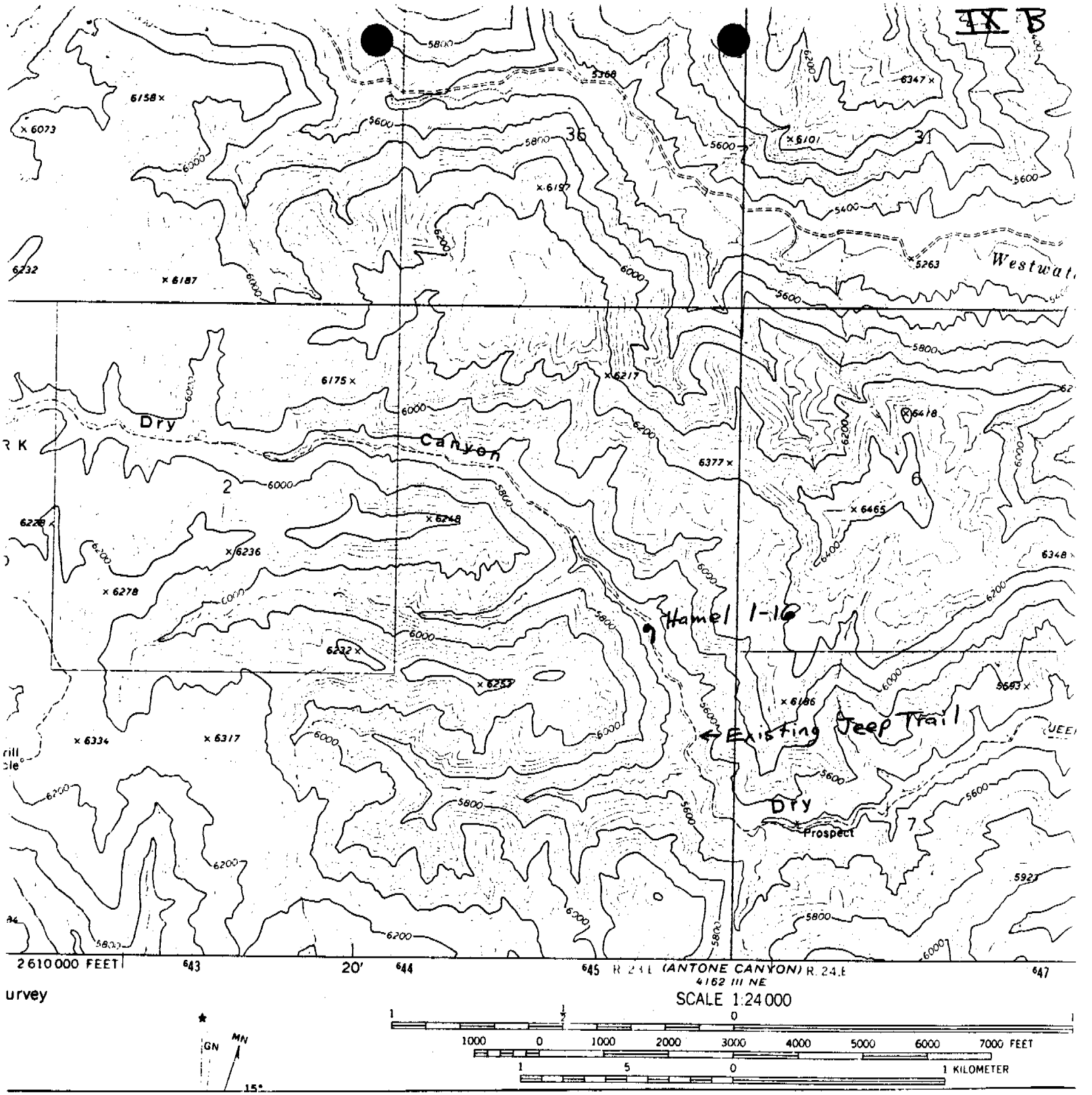
SCALE	1" = 50'
DATE	6/5/80
DRAWN BY	LHS
CHECKED BY	JHL
DATE OF SURVEY	6/3/80

TENNECO OIL
HAMEL–USA 1-16

SHEET 3 of 5

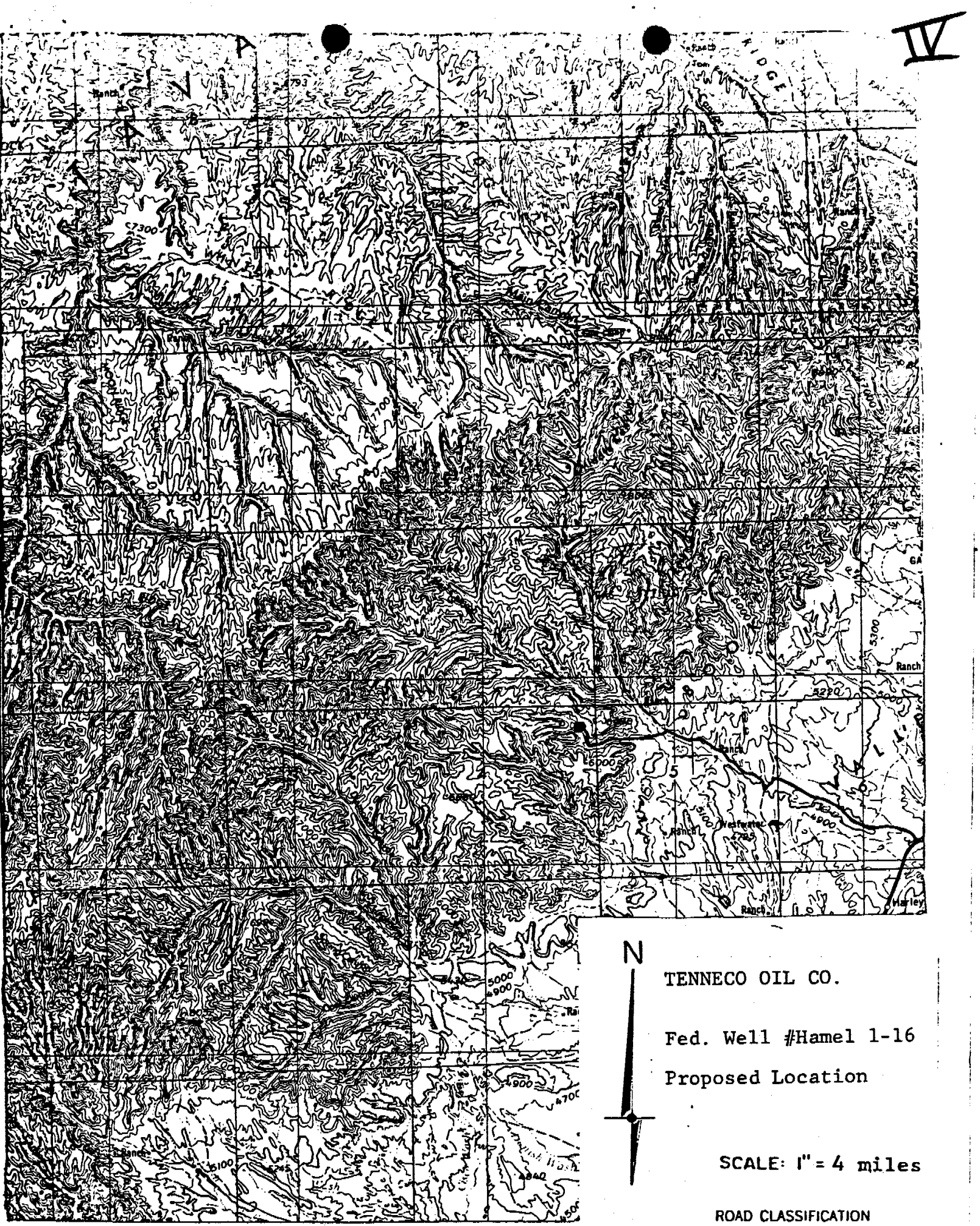
JOB NUMBER 802738

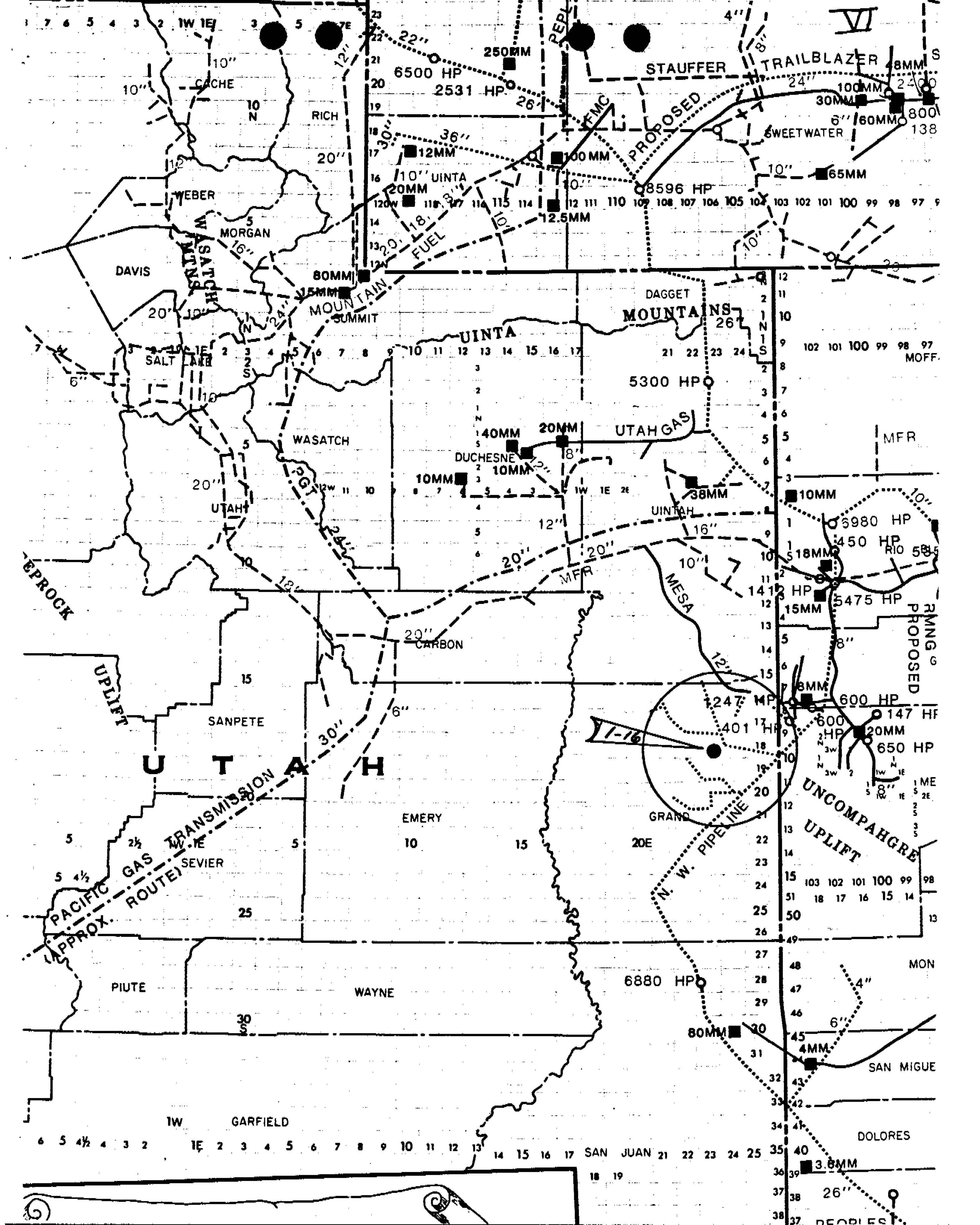

T.17S.
T.18S.
R.23E
R.24E
36
31
1
6
Canyon
Canyon
Dry
Dry
Westwater
LOCATION
HAMEL 1-16
10 MILES
IMPROVED DIRT
TO U.S. 6 & 50
2.7 MILES
IMPROVED DIRT
N
TENNECO OIL CO
HAMEL USA 1-16
PROPOSED LOCATION ⊕
B
SCALE: 1" = 2000'
ROAD CLASSIFICATION
Light-duty.
Unimproved dirt



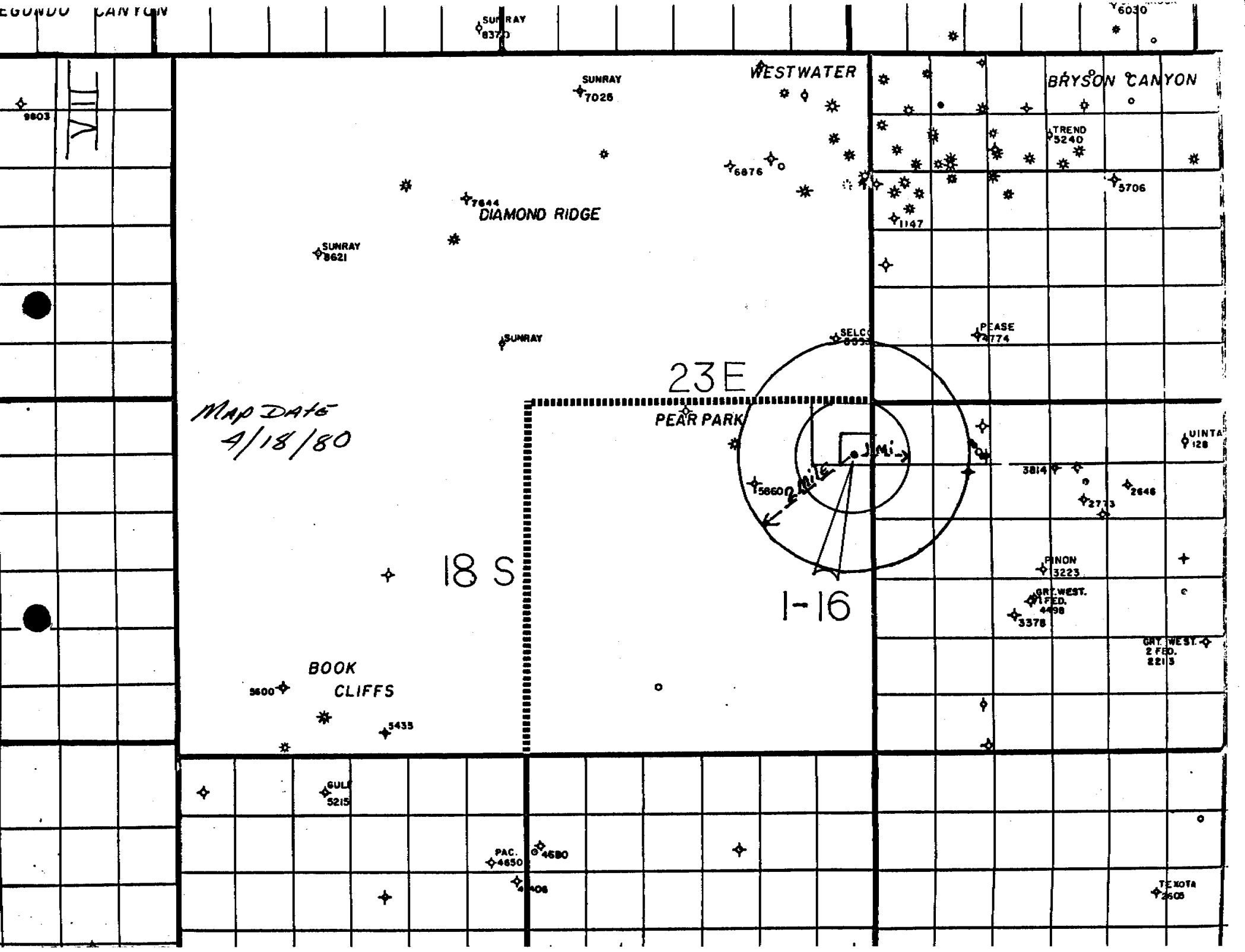
Location of Hamel 1-16 and associated access road. U.S.G.S. Dry Canyon, Utah 7.5' Quadrangle (1970).

Section 1, Township 18 South, Range 23 East, Salt Lake P.M., Grand County, Utah.


N
TENNECO OIL CO.
Fed. Well #Hamel 1-16
Proposed Location
SCALE: 1" = 4 miles
ROAD CLASSIFICATION
Light-duty
Unimproved dirt



VI
CACHE
RICH
WEBER
MORGAN
DAVIS
WASATCH MTNS
SUMMIT
SALT LAKE
WASATCH
UTAH
DUCHESNE
UINTA
DAGGET
MOUNTAINS
UINTAH
CARBON
SANPETE
EMERY
GRAND
SEVIER
PIUTE
WAYNE
GARFIELD
SAN JUAN
U T A H
UPLIFT
UNCOMPAHGRE UPLIFT
PACIFIC GAS TRANSMISSION (APPROX. ROUTE)
N. W. PIPELINE
MOUNTAIN FUEL
UTAH GAS
STAUFFER
TRAILBLAZER
PROPOSED
FMC
PGT
MFR
MESA
SWEETWATER
MOFF.
MON
SAN MIGUE
DOLORES
PEOPLES
6500 HP
2531 HP
8596 HP
5300 HP
6980 HP
450 HP
1413 HP
5475 HP
1247 HP
401 HP
600 HP
147 HP
650 HP
6880 HP
250MM
100MM
12MM
20MM
12.5MM
80MM
15MM
40MM
10MM
38MM
18MM
8MM
4MM
3.8MM
65MM
48MM
30MM
60MM
1-16


SUNRAY
8370
6030
SUNRAY
7026
WESTWATER
BRYSON CANYON
9803
TREND
5240
6876
5706
7644
DIAMOND RIDGE
1147
SUNRAY
8621
SUNRAY
PEASE
4774
23E
PEAR PARK
MAP DATE
4/18/80
1 Mi.
1 Mile
5860
UINTA
128
3814
2646
2773
18 S
PINON
3223
GRT. WEST.
1 FED.
4498
3378
1-16
GRT. WEST.
2 FED.
2213
BOOK
CLIFFS
5600
5435
GULF
5215
PAC.
4650
4680
4406
TEXOTA
2605

BIRCH 1-16

TEXACO OIL COMPANY - 10 POINT PLAN

1. The geological name of the surface formation:

2 & 3. Estimated Formation Tops:

(See Attached Drilling Procedure)

4. Proposed Casing Program:

(See Attached Drilling Procedure)

5. Blowout Preventors:
Hydraulic double ram. One set of rams will be provided each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2". BOP's, drills and tests will be recorded in the driller's log. BOP will be tested every 24 hours and recorded in IADC Log.

6. Mud Program: (Sufficient quantity of mud and weight material will be available on location).

(See Attached Drilling Procedure.

7. Auxiliary Equipment:
   a. Kelly cock will be in use at all times.
   b. Stabbing valve to fit drill pipe will be present on floor at all times.
   c. Mud monitoring will be visual. No abnormal pressures are anticipated.
   d. Floats at bits.
   e. Drill string safety valve(s) to fit all pipe in drill string will be maintained on the rig floor while drilling operations are in progress.

8. Coring, Logging, and Testing Program:

(See Attached Drilling Procedure)

9. No abnormal pressures, temperatures or potential hazards such as H_2S are expected to be encountered.

10. The drilling of this well will start approximately (June/July) and continue for 10 to 12 days.

Your office will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD
DENVER, COLORADO 80222

DRILLING PROGRAM

DATE: January 31, 1980

LEASE: BIRCH

WELL NO.: 1-16

LOCATION: 712.2 FSL, 1425.8 FEL
Sec. 1, T 18S, R 23E
Grand County, Utah

FIELD: ENTRADA TEST

ELEVATION: 5560' Est. G.L.

TOTAL DEPTH: 5325'

PROJECTED HORIZON: Entrada

SUBMITTED BY: John W. Olver DATE: 2/1/80

APPROVED BY: _____ DATE: _____

JWO/ms

CC: Administration
DSB Well File
Field File

ESTIMATED FORMATION TOPS

Mesa Verde	Surface	
Mancos	750'	
Castlegate	930'	(Water or Gas)
Frontier	4200'	
Dakota Silt	4460'	
Dakota	4550'	(Gas)
Morrison	4730'	
Salt Wash	5000'	(Gas)
Entrada	5290'	
T.D.	5325'	

1. MIRURT.
2. Set 1-3 jts. of 9 5/8" casing as needed to be used as conductor pipe.
3. Install casing head and nipple up rotating head and blooie line.
4. Drill 8 3/4" hole to ± 1150' or through the Castlegate Formation.
5. Run 7", 23#, K-55, ST&C surface casing to T.D. Cement with sufficient volume to circulate cement to the surface.
6. WOC. Nipple up BOP's, rotating head, choke manifold, etc. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes.
7. TIH and displace water in casing with air. Drill out shoe and dry up hole.
8. Drill 6 1/4" hole to T.D.
9. Log well as per G. E. Department recommendations.
10. If well is productive, run 4 1/2", 10.5#, K-55, ST&C casing to T.D. Cement with sufficient volume to cover all possible productive zones.
11. If well in non-productive, P & A as per Regulatory Agency Specifications.

CASING PROGRAM

Conductor:	30' to 125' as needed. 9 5/8", 36#, K-55, ST&C.
Surface:	±1150', 7", 23#, K-55, ST&C.
Production:	±5325', 4 1/2", 10.5#, K-55, ST&C.

MUD PROGRAM

1. Anticipate drilling entire hole with air.
2. In the event liquids are encountered, mist drilling will be attempted.
3. Should mist drilling be unsuccessful, the hole will have to be mudded up.
4. Also, if gas in encountered in sufficient volume to compromise the safety of the operations, mudding up will be required.
5. If mudding up is necessary, the following guidelines should be followed: (1) Weight ± 9.0 ppg. (2) Vis. as needed to clean hole. (3) W.L. 10 cc or less.

EVALUATION

Cores and DST's: No cores or DST's are anticipated.

Deviation Surveys:

0-+1150' 1°)
1150'-T.D. 5°) Surveys to be run every 500' or on trips, whichever comes first. Record surveys on IADC Drilling Report Sheet.

Max. allowable deviations:
1) 1° change per 100' intervals.
2) 1° at surface casing setting depth.
3) 5° at T.D.

In the event that the maximum allowable deviations are exceeded, the Denver Office of Tenneco Oil Company will be notified immediately.

Samples: None.

Logs:
SNP/GR)
FDC/GR) Air drilled
DIL)

FDC/CNL)
DIL/LL8 w/sp) Mud drilled

BLOWOUT EQUIPMENT

1. Double ram hydraulic with pipe and blind rams operated by an accumulator.
2. Rotating head on air/mist holes.
3. Preventers must be checked for operation every 24 hours. This check MUST BE RECORDED on the IADC Drilling Report Sheet.

Drilling reports [redacted] the past 24 hours will inclu[redacted]epth, footage, time distribution, activity breakdown, mud properties, b[redacted] record, bottom hole assembly, daily and cumulative mud costs, plus any other pertinent information, will be called into Tenneco Oil Company, Denver, Colorado, between 7:30 a.m. and 8:00 a.m.

1. 303-758-7130 (Office) Don Barnes
   303-758-7287 (Office) Don Barnes' private line, Monday-Friday (before 7:45 a.m.)
   303-936-0704 (Home) Don Barnes, weekends and holidays.

2. George Ramsey (Home) 303-771-5154.

3. John Owen (Home) 303-795-0221.

The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD
DENVER, COLORADO 80222

ATTENTION: Drilling Department

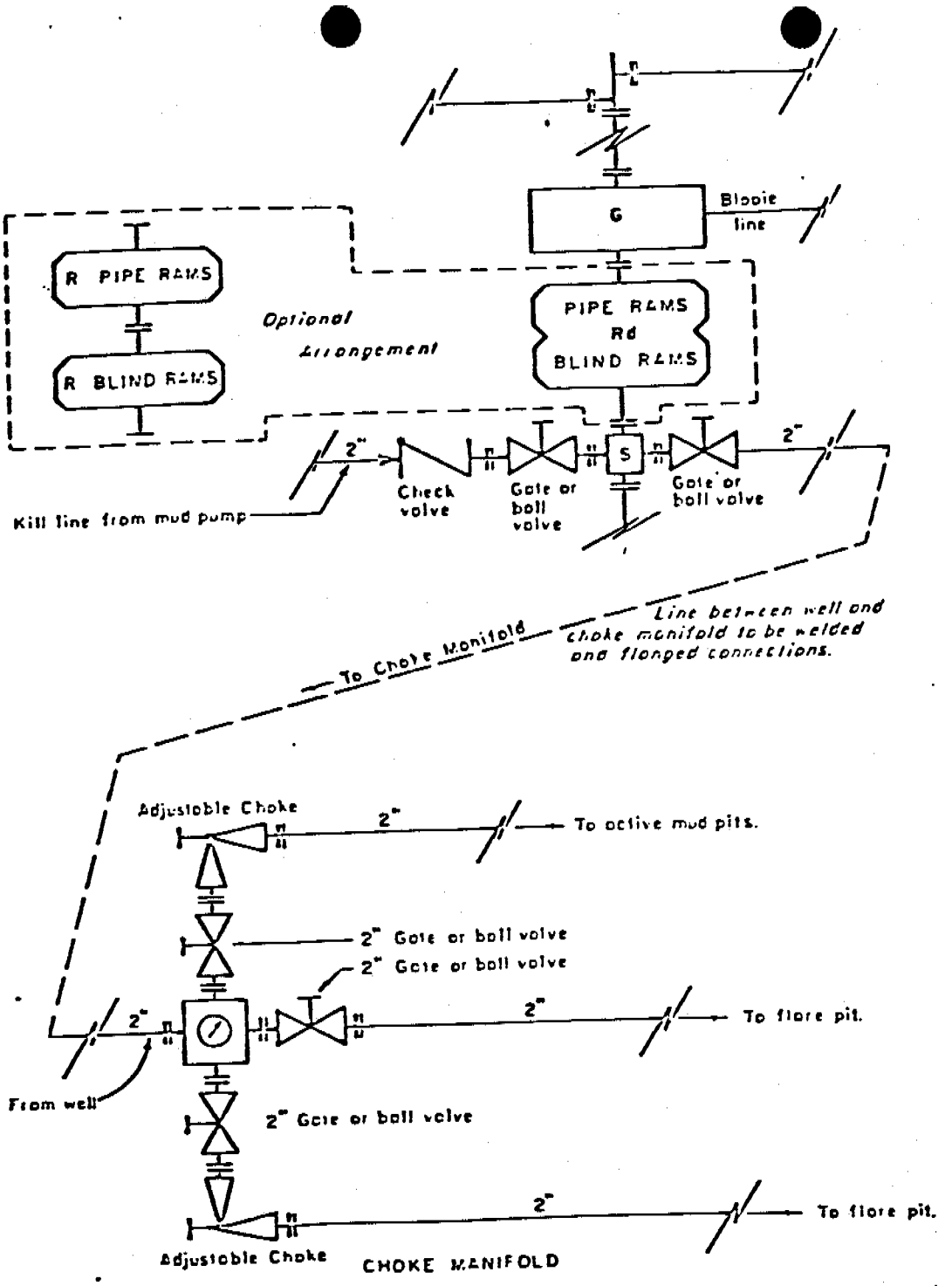
IN CASE OF EMERGENCY, NOTIFY THE FOLLOWING:

1. Mr. Don Barnes, Division Drilling Engineer.

2. Mr. George E. Ramsey, Jr., Drilling Engineers Supervisor

3. Mr. John W. Owen, Project Drilling Engineer.

4. Mr. Mike Lacey, Division Production Manager (Home 303-979-0509).



All equipment to be 3,000 psi working pressure except as noted.

Rd Double ram type preventer with two sets of rams.

R Single ram type preventer with one set of rams.

S Drilling spool with side outlet connections for choke and kill lines.

G Rotating head 150 psi working pressure minimum

ARRANGEMENT C

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION

REQUIRED MINIMUM
BLOWOUT PREVENTER AN
CHOKE MANIFOLD

J. MAGILL 10-26-78 EVI

I. EXISTING ROADS

(a) Proposed Well Site Location: As surveyed by a registered land surveyor is located 712.2 FSL, 1425.8 FEL, Sec. 1, T18S, R23E, Grand County, Utah.
See Exhibit I.

(b) Planned Access Route: See Exhibits IV & V.

(c) Access Road Labelled:

Color Code: Red - Improved surfaced roads
Blue - New access road to be constructed.

(d) Not applicable, the proposed well is a development well.

(e) The existing roads are show in Exhibit VII.

(f) Existing Road Maintenance or Improvement:

The existing road will not require improvement. However, this road, along with the new access road, may require occasional grading to return the road surface to a cross section necessary for proper drainage.

II. PLANNED ACCESS ROUTE

(a) Route Location - (See Exhibits V and IV)

The planned new access route was selected to provide the shortest distance to the well site with acceptable grades from the main connector road. Temporary access will be built initially, if the facility is productive, the temporary road will be improved as follows:

(1) Width:
The average dirt width will be twenty feet. The average traveled surface width will be twenty feet. Road construction will be in accordance with typical roadways requested by the U. S. Bureau of Land Management.

(2) Maximum Grades:
The maximum grade will be 15% percent, however, this may vary as topographical conditions vary.

(3) Turnouts: Turnouts are not required

(4) Drainage Design:
Prior to construction of the new access road, the brush and topsoil will be windrowed to each side of the alignment outside construction limits. The subgrade surface will be a minimum elevation of one foot above ditch grade. The road surface will be center crowned and the inslopes will have a maximum slope of 3:1 and fill slopes will be a maximum of 2:1.

(5) Culverts Use, Major Cuts and Fills: Culverts will be placed as needed and suggested by the BLM.

Max: cut - Minimal cuts and fills required as the existing
Max: fill - jeep trail will be followed except where there is water then we will move out of wash bed.

(6) Surfacing Material:
The proposed permanent access road will be constructed with native material.

(7) Gates, Cattleguards, Fence Cuts:

Not needed

(8) New portion of road will be center flagged and follow existing vehicular way.

III. LOCATION OF EXISTING WELLS

The proposed well is a development well. Exhibit VII shows existing wells within a one mile radius.

A. Water Wells: N/A
B. Abandoned Wells: N/A
C. Temporarily Abandoned Wells: N/A
D. Disposal Wells N/A
E. Drilling Wells N/A
F. Producing Wells: See Exhibit VII N/A
G. Shut-In Wells: N/A
H. Injection Wells: N/A
I. Monitoring or Observation Wells: None.

IV LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. Existing facilities within one mile owned or controlled by Lessee/Operator: N/A

(1) Tank batteries - N/A
(2) Production facilities - N/A
(3) Oil Gathering Lines - N/A
(4) Gas Gathering Lines - N/A
(5) Injection Lines - N/A
(6) Disposal Lines - N/A

B. New Facilities in the Event of Production:

1. New facilities: well head, condensate tank, production unit, meter house

2. Dimension of the facilities are shown in Exhibit II & III.

3. Construction will be to strip the topsoil, level drilling pad. Dehydrator pits will be constructed with soil materials native to the site. Construction methods will be employed to assume that no drainage flows are impounded to prevent the loss of any hydrocarbon from the site. This is to be done in a manner to facilitate rapid recovery and clean up.

4. Protective measures to protect wildlife and livestock: Dehydrator pits shall be overhead flagged should any hydrocarbon material be present on the surface. The dehydrator pits shall be fenced to prevent entry of livestock or wildlife.

C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed:

Upon completion of well, areas required for continued use will be graded to provide drainage and minimize erosion. Those areas not required for continued usage will be graded to provide drainage and minimize erosion. Those areas unecessary for use will be graded to blend with the surrounding topography. Topsoil will be replaced on those areas and seeded according to BLM specifications.

V. LOCATION AND TYPE OF WATER SUPPLY

(a) The water source is Westwater Spring purchased through Bill Buniger.

(b) Water Transportation system: Water to be hauled in trucks from an undetermined pick up point.

(c) Water Wells: None

VI. SOURCE OF CONSTRUCTION MATERIALS

(a) Materials:

Construction materials will consist of soil encountered with the boundaries of the proposed site. Topsoil will be stripped to a depth of six inches and stockpiled in an area that does not interfear with operations.

(b) Land Ownership:

The planned site and access roads lie on Federal land administered by the United States Department of Interior, U.S. Bureau of Land Management.

(c) Materials Foreign to Site: NA

(d) Access road shown under item IV & V.

VII. METHODS OF HANDLING WASTE MATERIALS

(a) Cuttings:

Will be contained within the limits of the reserve pit.

(b) Drilling Fluids:

Will be retained in the reserve pit.

(c) Produced Fluids:

No substantial amount of water is expected. The amount of hydrocarbon that may be produced while treating will be retained in the reserve pit. Previous to clean up operations the hydrocarbon materials will be skimmed or removed as the situation would dictate.

(d) Sewage::

Sanitary facilities will consist of at least one chemical toilet. Waste will be contained in a pit and backfilled immediately following the drilling operations.

(e) Garbage:

A burn cage will be constructed and fenced with small mesh wire. The small amount of refuse will be removed upon completion, and taken to a land fill.

(f) Clean up of well site:

After drilling, the surface of the drill pad will be cleaned and graded to accommodate a completion rig. The "mouse hole and rat hole" will be backfilled to prevent injury and hazard for livestock. Reserve pit will be fenced until dry and it can be backfilled and restored to natural terrain.

VIII. ANCILLARY FACILITIES

None required.

IX. WELL SITE LAYOUT

1. See Exhibits II & III
2. Location of pits: II
3. Rig Orientation: III

4. Pits will be unlined, unless otherwise required.

X. PLANS FOR RESTORATION OF SURFACE

A. Reserve Pit Cleanup:

The pit will be fenced prior to rig release and shall be maintained until clean up. Previous to backfill operation, any hydrocarbon material on the pit surface will be removed. The fluids and solids contained in the pit shall be backfilled with soil excavated from the site and with soil adjacent to the reserve pit. The restored surface of the reserve pit will be contoured to prevent impoundment of any drainage flows. The gradient of the surface will be maintained to prevent sudden acceleration of drainage flows which could cause continued erosion of the surface. Following backfill completion, topsoil removed from the disturbed areas will be replaced in a uniform layer. The reserve pit wil' be seeded per Bureau of Land Management recommendation during the appropriate season following final restoration of the site.

B. Restoration Plans - Production Developed:

The reserve pit will be backfilled and restored as described under Item A. In addition, those disturbed areas not required for production will be graded to blend with the surrounding topography. Topsoil will be placed on these areas and seeded. The portion of the drill pad required for production and turning areas will be graded to minimize erosion and provide access to production facilities under inclument conditions. Following final improvement and surfacing of that portion of new access road, the topsoil windrowed to each side of the alignment will be placed on the cut slopes. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C. Restoration Plans - No Production Developed:

Of course the reserve pit will be restored as described above. With no production developed, the entire surface disturbed by construction of the drilling pad will be restored to its natural terrain and reseeded per Bureau of Land Management requirements.

XI. OTHER INFORMATION

A. Surface Description: The proposed site is in a narrow NW/SE canyon on the SW slope above the existing drainage. The soil is sandy fractured sandstone with numerous sandstone boulders and sparce gravel. The principal vegetation is pinon, juniper, sage, biter brush, service berry and native grasses.

B. Other Surface - Use Activities: The surface is federally owned and managed by the BLM/USGS. The predominant surface use is mineral exploration and production.

C. Proximity of Water, Dwelling, Historical Sites:

1. Water: No reservoirs or live streams in the area. The drainage has an intermittent flow.
2. Occupied Dwellings: Not existing.

3. Historical Sites: An Archaeological Reconnissance has been performed for this location and clearance has been granted. See Exhibits IX, IXA, IXB.

XII. OPERATOR'S REPRESENTATIVE

Field Personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Donald Barnes
720 So. Colorado Blvd.
Denver, Colorado 80222
Office: (303) 758-7130
Extension 212

M. L. Freeman
720 So. Colorado Blvd.
Denver, Colorado 80222
Office: (303) 758-7130
Extension 280

XIII. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Tenneco Oil Company and its contractors and sub-contractors will conform to this plan.

DATE: June 19, 1980

M. L. Freeman
Staff Production Analyst

For BLM Use Only IX A

U.S.
Department of the Interior
Bureau of Land Management
Utah State Office

Summary Report of
Inspection for Cultural Resources

BLM Report ID |_|_|_|–|_|_|_|_|_|_| (1, 4, 10)

Report Acceptable Yes __ No __

Mitigation Acceptable Yes __ No __

Comments: ______

1. Report Title |H|A|M|E|L| |1|-|1|6| (11–40)

2. Development Company Tenneco Corporation

3. Report Date |0|6| 2 |1|9|8|0| (41 42 MONTH, 43 YEAR 46)

4. Antiquities Permit No. 80-UT-034

5. Responsible Institution |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_| (47–61)

County Grand

6. Fieldwork Location: TWN |1|8|S|_| (62–65) Range |2|3|E|_| (66–69) Section(s) |0|1| (70 71) |_|_| (72 73) |_|_| (74 75) |_|_| (76 77)

TWN |_|_|_|_| (78–81) Range |_|_|_|_| (82–85) Section(s) |_|_| (86 87) |_|_| (88 89) |_|_| (90 91) |_|_| (92 93)

7. Resource Area |G|R| (110 111) TWN |_|_|_|_| (94–97) Range |_|_|_|_| (98–101) Section(s) |_|_| (102 103) |_|_| (104 105) |_|_| (106 107) |_|_| (108 109)

PO= PONY EXPRESS, BR= BEAR RIVER, PR= PRICE RIVER, WS= WARM SPRINGS
BC= BOOK CLIFFS, HR= HOUSE RANGE, SE= SEVIER RIVER,
HM= HENRY MOUNTAINS, BE= BEAVER RIVER, DX= DIXIE
KA= KANAB, ES= ESCALANTE, SJ= SAN JUAN, GR= GRAND
SR= SAN RAFAEL, DM= DIAMOND MOUNTAIN,

Fill in spaces 65, 69, 81, 85, 97, 101 Only if:
V= Vernal Meridian
H= Half Township

8. Description of Examination Procedures: The proposed well pad was recently relocated approximately 100 m from its originally planned location. The original location and access road were previously inspected for cultural resources. Consequently, the new proposed well location was intensively surveyed, as well as a 200-foot road right-of-way, centered on an existing jeep trail, extending from the new location to the previously surveyed access road.

9. Linear Miles Surveyed and/or |_|_|_|_|_|_| (112–117)

Definable Acres Surveyed and/or |_|_|_|_|_|_| (118–123)

*Legally Undefinable Acres Surveyed |_|_|_|_|_|_| (124–129)

(*A parcel hard to cadastrally locate i.e., center of section)

10. Inventory Type |I| (130)

R= Reconnaisance
I= Intensive
S= Statistical Sample

11. Description of Findings (attach appendices, if appropriate)

No prehistoric or historic cultural resources were observed.

12. Number Sites Found: No sites= 0 |0|_|_|_|_| (131–135)

13. Collection: |N| (136) Y= Yes, N= No

14. Actual/Potential National Register Properties Affected:

N/A

15. Conclusion/Recommendations:

Recommend cultural resource clearance.

16. Signature and Title of Institutional Officer Responsible Paul R. Nickens
Principal Investigator

Note: Include only requested information in numbered spaces.
* For extra locationals use additional 8100-3 forms.

Ut 8100-3 (1/80)

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT LEASE NO. U 33106

OPERATOR: TENNECO OIL CO. WELL NO. 1-16

LOCATION: SW ¼ SE ¼ SE ¼ sec. 1, T. 18 S, R. 23 E, SLM

GRAND County, UTAH

---

1. Stratigraphy:

MESAVERDE Gp		FRONTIER Fm	4200'
PRICE RIVER Fm		DAKOTA SILT	4960'
FARRER MEMBER	0	DAKOTA SS	4550'
NESLEN MEMBER	350'	MORRISON Fm	4730'
SEGO SS	670'	SALT WASH MEMBER	5000'
BUCK TONGUE	750'	ENTRADA SS	5290'
CASTLEGATE SS	930'	TD	5325
MANCOS SH	1080'		

2. Fresh Water:

FRESH WATER MAY BE EXPECTED FROM THE FARRER MEMBER, THE NESLEN MEMBER, THE SEGO SS AND THE CASTLEGATE SS OF THE PRICE RIVER Fm.

3. Leasable Minerals:

GAS MAY OCCUR IN THE DAKOTA SS, THE MORRISON Fm (INCLUDING THE SALT WASH MEMBER) AND POSSIBLY IN THE CASTLEGATE SS.

COAL MAY OCCUR IN THE NESLEN MEMBER, PRICE RIVER Fm, ALTHOUGH THE COAL BEDS MAY BE THIN AND NON-PRODUCTIVE.

4. Additional Logs Needed: LOGGING TO IDENTIFY AND PROTECT POSSIBLE COAL BEDS IN THE NESLEN MEMBER SHOULD BE USED.

5. Potential Geologic Hazards: NONE ANTICIPATED

6. References and Remarks: UGMS COAL MONOGRAPH, # 2. DOELLING. PI FILES

Signature: Kenneth J Stahl Date: 6 - MAY - 1980

Oil and Gas Drilling

EA No. 525-80

United States Department of the Interior
Geological Survey
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

USUAL ENVIRONMENTAL ASSESSMENT

Date July 14, 1980

Operator Tenneco Oil Company   Well No. 1-16

Location 712' FSL 1425' FEL   Section 1   Township 18S   Range 23E

County Grand   State Utah   Field/Unit Birch

Lease No. U-33106   Permit No. ______

Prepared by: John Connor
Petroleum Engineer

Reviewed by: Glenn Doyle
Environmental Scientist
Grand Junction, Colorado

Joint Field Inspection Date: July 9, 1980

Field Inspection Participants, Titles, and Organizations:

Jeff Robbins, Pete Charney,	
Eddie Bullock	Bureau of Land Management, Moab
John Connor	U. S. Geological Survey, Grand Junction
Lee Freeman	Tenneco
Bill Buniger	Dirt Contractor

Admin Compl 7/
Pad 100x310
pit 25x100
10' x 20' new access road
2 7/10 mi x 20' improve road
3/4 cc
Access changed
Cond 7 Appr pg 7
1-5

Related Environmental Documents:

BLM-Moab, Book Mountain Unit Resource Analysis.
BLM-Colorado, Baxter-Douglas Unit Resource Analysis.
BLM-Utah, Big Flat-Squaw Park Unit Resource Analysis.
BLM-Colorado, Oil and Gas Umbrella Leasing EAR.
BLM-Utah, 1979, Final initial wilderness inventory, USDI, August, 50 pp.

DESCRIPTION OF PROPOSED ACTION

Proposed Action:

1. Location State: Utah
County: Grand

712 ' F S L, 1426 ' F E L, NE ¼ SW ¼

Section 1, T18S, R23E,

2. Surface Ownership Location: Public
Access Road: Public

Status of Reclamation Agreements: Not Applicable

3. Dates APD Filed: June 25, 1980
APD Technically Complete: July 9, 1980
APD Administratively Complete:

4. Project Time Frame Starting Date: July 1980
Duration of drilling activities: 25 days.

A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseeding would normally occur within one year; revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:

None known

6. Nearby pending actions which may affect or be affected by the proposed action:

None known

7. Status of variance requests:

None known

The following elements of the proposed action would/could result in environmental impacts:

1. A drill pad 100' wide x 310' long and a reserve pit 25' x 100' would be constructed. Approximately 100 feet of new access road, averaging 20' in width, would be constructed and approximately 2.7 miles of existing road would be improved to 20' wide from a maintained road. 0.75 acres of disturbed surface would be associated with the project.

2. Drilling to a total depth of 5325'.

3. Waste disposal

4. Traffic

5. Water requirements

6. Completion

7. Production

8. Transportation of hydrocarbons

Details of the proposed action are described in the Application for Permit to Drill.

The access road was changed to avoid drainage and reduce environmental impacts. Engineers from the Bureau of Land Management recommended that the access road be kept off the dry canyon floor wherever possible to minimize drainage impact and road maintenance.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography - Regional topography is the high, south-facing cliffs and narrow canyons of the Book Cliffs Region of Western Colorado. The location sits on a east-sloping flank of Dry Canyon, a south-sloping drainage south of the cliffs.

PARAMETER

A. Geology - The surface formation is Mesaverde, Cretaceous in age. Underlying the Mesaverde are the Mancos, Castlegate, Frontier, Dakota Silt, Dakota, Morrison, Salt Wash, and Entrada Formations.

Information Source: ME, District Geologist.

1. Other Local Mineral Resources to be Protected: Coal may be found in the Neslen Member of the Price River Formation in thin, lenticular and, therefore, probably subeconomic amounts. Additional logging suites requested for coal identification and protection: Natural gamma and gamma density.

Information Source: Application to Drill; ME, District Geologist; USGS Mining Supervisor.

2. Hazards:

a. Land Stability: The location and access are built on the Mesaverde Sandstone. This soil is considered a moderate engineering material and is stable, provided the slopes are moderate, mositure content is low and compaction of disturbed areas is adequate.

Information Source: John Connor, Petroleum Engineer, USGS.

b. Subsidence: Subsidence can occur with the withdrawal of oil, gas, and/or water.

Information Source: Keller, Edward A., 1976, Environmental geology, Charles E. Merrill, 488 pp.

c. Seismicity: Seismic risk: low. Statistically, greatest damage would be moderate, corresponding to intensity VII of Modified Mercalli Intensity Scale, 1931.

Information Source: Perkins, David M., 1974, Seismic risk maps, Reprint of Earthquake information bulletin, 6(6) Nov-Dec.; Algermissen, S. T., and Perkins, David M., 1977, Earthquake hazards map of the United States, Reprint from Earthquake Information Bulletin, 9(1) Jan-Feb., 4 pp.; von Hake, Carl A., Earthquake History of Utah, NOAA.

d. High Pressure Zones/Blowout Prevention: No high pressure zones expected. Blowout prevention systems detailed in APD.

Information Source: Application to Drill and ME, District Geologist.

B. Soils

1. Soil Character: No detailed soil surveys done in area. Changes in soil fertility, horizons, slope stability, etc., cannot be predicted. Soils are considered nitrogen-poor, alkalic soils that support the salt-desert community.

Information Source: Field observation, John Connor.

2. Erosion/Sedimentation: Erosion/sedimentation would increase as would runoff potential. Extent of increases unpredictable without site-specific studies being done.

Information Source: Field observation.

C. Air Quality - Wellsite lies in Class II attainment area. No Class I attainment areas are near, or adjacent to, proposed location.

Information Source: Field observation.

D. Noise Levels - Ambient noise levels will be temporarily increased over the duration of drilling activity. Wildlife will avoid immediate area. After well completion, if well is dry hole, noise levels will return to nearly the predrill ambient levels. If the well produces marketable quantities of oil or gas, noise levels will rise periodically above predrill ambient levels.

Information Source: Field observation.

E. Water Resources

1. Hydrologic Character

a. Surface Waters: The proposed wellsite slopes to the east. Due to the character of the location and its slope, no diversion ditches will be necessary.

Information Source: Field observation.

b. Groundwaters: Fresh waters may be encountered in the Farrer Formation, the Neslen Member of the Price River Formation, the Sego Sandstones and the Castlegate Sandstone. The casing and cementing programs need to protect any fresh water formations from interaquifer leakage and pollution.

Information Source: ME, District Geologist and attached BLM Stipulations.

2. Water Quality

a. Surface Waters: Impacts to surface water quality are judged as insignificant, provided the operator maintains a fluid-tight reserve pit. Release of produced and/or circulating fluids from the reserve pit could cause a significant adverse affect on surface water quality, depending on fluid's chemical composition.

Information Source: Field observation.

b. Groundwaters: Operator proposes 1750' of surface casing. Commingling of drilling fluids with potentially usable water could render groundwater unusable. Pits would be unlined.

Information Source: Application to Drill.

F. Flora and Fauna

1. Endangered and Threatened Species Determination

Based on the preliminary field comments received from the Moab Area Bureau of Land Management on July 9, 1980, we determine that there would be no effect on endangered and threatened species and/or their critical habitat.

2. Flora: The location supports greasewood, sage, several juniper trees and various grasses. Construction would remove about 0.75 acres of vegetation increasing potential for non-point erosion and decreasing soil fertility.

Information Source: Field observation.

3. Fauna: Wildlife in the area consists of mule deer, rabbits, coyotes, and small rodents. Vegetation removal reduces wildlife habitats and food sources. Deer are not known to winter in the area. No known migratory bird

nesting areas, strutting or breeding grounds, or fish-spawning areas would be impacted by proposed action.

Information Source: Field observation.

G. Land Uses

1. General: Oil and gas operations, recreation, and grazing are major land uses. Amount and quality of land available to livestock, wildlife, and recreationists would be reduced during well life.

Information Source: Field observation.

2. Affected Floodplains and/or Wetlands: None affected.

Information Source: Field observation.

H. Aesthetics: Operation would not blend with natural surroundings. Most likely unappealing to recreationists. Impact duration: life of well.

Information Source: Field observation.

I. Socioeconomics: The effect of one well on local and regional population and economy would be considered minor. If major discovery, then consider: Population increase, community services taxed, resources depleted, cumulative impacts multiply, pipelines and transportation routes expand.

Information Source: G. Doyle, Environmental Scientist, USGS.

J. Cultural Resources Determination: Based on the preliminary field comments received from the Moab Area Bureau of Land Management on July 9, 1980, we determine that there would be no effect on cultural resources subject to archaeological clearance. Information Source: Attached Stipulations.

K. Adequacy of Restoration Plans: Rehabilitation plan judged as adequate. Problems hampering restoration: a) Area subject to short growing season; b) limited precipitation during growing season; and c) generally, very little topsoil which has limited organic matter and is low in fertility.

Information Source: David Oberwager, Env. Spec. (Reclamation), USGS-AOSO.

Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.

2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

Adverse Environmental Effects:

1. If approved as proposed:

a. About 0.75 acres of vegetation would be removed, increasing and accelerating erosion potential.

b. Pollution of groundwater systems would occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.

c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.

d. The potential for fires, leaks, spills of gas and oil or water exists.

e. During construction and drilling phases of the operation, noise and dust levels would increase.

f. Distractions from aesthetics during the lifetime of the project would exist.

g. Erosion from the site would eventually be carried as sediment in the Colorado River watershed. The potential for pollution to the Colorado River would exist through leaks and spills.

h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of an irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

2. Conditional approval

a. All adverse impacts described in section one above would occur, except

1) By scraping an average of 8" of topsoil to the north edge of the pad and stockpiling it, the fertility of the site can be preserved.

2) The vegetation, when scraped separately and stored on the SW edge of the pad, will protect the integrity of the topsoil.

3) By using the excess fill for upgrading the road site and by balancing the cuts and fills, the need for excess cut storage will be eliminated.

Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

1. See attached Lease Stipulations.
2. See attached BLM Stipulations.
3. Scrape 8" of topsoil to the north edge of the pad.
4. Scrape the vegetation and store it separately on the SW side of the pad.
5. Use excess fill for road improvement and better balance of cuts and fills.

Controversial Issues and Conservation Division Response: None known at this time.

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

Determination

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102(2)(C).

DISTRICT ENGINEER AUG 08 1980

District Engineer
U. S. Geological Survey
Conservation Division
Oil & Gas Operations
Salt Lake City District

Date

Tenneco
F-16 South.

STANDARD STIPULATIONS FOR OIL & GAS EXPLORATION

Contact this office at least 24 hours prior to beginning construction of access road and pad.

Stockpile the surface 8 inches of topsoil in a wind-row on the north side of the location.

The upper banks (uphill side) of all cuts will be rounded during construction of the access road and pad.

Notify the BLM District Archaeologist if cultural material from subsurface deposits is exposed during the operation.

Trees will be placed on the southwest edge of the location and dispersed over the location when restoration procedures are undertaken.

The access road will be roughened in to allow entrance to heavy equipment. No major road construction is necessary.

If production is obtained, the access road will be upgraded to BLM specifications for long-term roads as outlined in the surface use standards section of the "Oil and Gas" pamphlet (joint BLM and USGS publication).

Production facilities and pipeline route are approved on this location under lease rights.

Rehabilitation of the site and access road will be accomplished in accordance with the enclosed restoration procedures.

RECLAMATION PROCEDURES IN GRAND RESOURCE AREA

1. Disk or rip pads and access roads.

   a. Overlap passes in order to insure complete treatment.

2. Contour pads and access roads.

   a. Lay berms into centers.

   b. Use cut material for fill areas.

   c. Lay stockpiled surface soil over top of pads and spread evenly.

   d. On highly erosive soils, it may be more beneficial to grade slopes to reduce steepness.

   e. Do not smooth pads out, leave a roughened surface. On steeper slopes and slopes with clayey soils scarify or serrate the ground in order to increase water infiltration and reduce erosion.

3. Water bar roads where required by this office.

* 2%	Grade	-	200 ft. intervals
2-4%	Grade	-	100 ft. intervals
4-5%	Grade	-	75 ft. intervals
5%	Grade	-	50 ft. intervals

   * Actual spacing may vary according to soil stability. Lighter textured soils will require more frequent water bars. When natural drainage ways are present, water bars are to be constructed to make maximum use of them. Plan operations so that natural drainage ways do not become blocked.

4. Seed roads and pads in the fall (Oct. through mid-Dec.).

Seed Mixture

Grass		Lbs/Acre
Agropyron intermedium	Intermediate wheatgrass	1
Oryzopsis hymenoides	Indian rice grass	1
Hilaria jamesii	Galleta grass	1
Stipa comata	Needle and thread grass	1
Forbs		
Sphaeralcea coccinea	Globemallow	1
Shrubs		
Ephedra nevadensis	Ephedra	1
Cercocarpus montanus	Birchleaf mahogony	1
Atriplex canescens	Four-wing saltbush	1
		8

** FILE NOTATIONS **

DATE: Jan. 30, 1981

OPERATOR: Tenneco Oil Company

WELL NO: Birch 1-16

Location: Sec. 1 T. 18S R. 23E County: Grand

File Prepared: ☐ Entered on N.I.D: ☐

Card Indexed: ☐ Completion Sheet: ☐

API Number 43-019-30772

CHECKED BY:

Petroleum Engineer: M.J. Minder 1-30-81
Unit approval

Director:

Administrative Aide: C-3(c) spacing - needs topo exception

APPROVAL LETTER:

Unit

Bond Required: ☐ Survey Plat Required: ☐

Order No. ____ O.K. Rule C-3 ☐

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site ☐

Lease Designation Fed. Plotted on Map ✓

Approval Letter Written ✓

Hot Line ✓ P.I. ✓

February 2, 1981

Tenneco Oil Company
720 S. Colorado Blvd.
Denver, Colorado 80222

Re: Well No. Birch 1-16
Sec. 1, T. 18S, R. 23E
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (Acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30772.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

Michael T. Minder
Petroleum Engineer

/ko
cc: USGS

Form 9-331 C
(May 1963)

DUPLICATE

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: Sulphur Canyon

8. FARM OR LEASE NAME: Birch (old name Hamel)

2. NAME OF OPERATOR: Tenneco Oil Company

9. WELL NO.: 1-16

3. ADDRESS OF OPERATOR: 720 So. Colorado Blvd., Denver, Colorado 80222

10. FIELD AND POOL, OR WILDCAT: Wildcat Entrada Test

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 712.2 FSL, 1425.8 FEL
At proposed prod. zone

DUPLICATE

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T18S, R23E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 16 miles northwest of Westwater, Utah

12. COUNTY OR PARISH: Grand

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
	967.00	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
	5325	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5555.4' GR

22. APPROX. DATE WORK WILL START*: June/July 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 3/4"	7" new	23# K55	±1150'	Circulate to surface
6 1/4"	4 1/2" new	10.5# K55	±5325'	Cover all possible productive zones.

Set 1-3 joints 9 5/8" casing as conductor pipe.

See Attached.

RECEIVED
FEB 4 1981
DIVISION OF
OIL, GAS & MINING

Area Manager
Grand Resource Area
Bureau of Land Management
Box M
Moab, Utah 84532

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED M. L. Freeman TITLE Staff Production Analyst DATE June 19, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W. P. Martin FOR E. W. GUYNN DISTRICT ENGINEER DATE JAN 30 1981

TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

NOTICE OF APPROVAL

*See Instructions On Reverse Side

ST-OG

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
Box 3249 Englewood, Co 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL 1425.8' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Birch

9. WELL NO.
1-16

10. FIELD OR WILDCAT NAME
Wildcat Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T18S, R23E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5555' gr.

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) commence drilling operations			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Tenneco proposes to change the name of the above referenced well to the Sulphur Canyon Unit USA 1-15.

1/31/81 MIRU. Spud 1/31/81. Drill 24" hole to 15'.
2/1/81 Drilled 24" hole to 26'. Hit hard sandstone.
2/2/81 RU Core bbl. Cored 4'
2/3/81 Finished drilling 24" hole to 31'
2/4/81 Set 14" csg. Cmt w/10sx Portland followed by 90sx Redicrete. Released rig 2/4/81 @ 12 noon.

*Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED William F. Knight TITLE Asst.Div.Adm.Mgr. DATE February 5, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL 1425.8' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Birch

9. WELL NO.
1-16

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 1 T18S R23E

12. COUNTY OR PARISH: Grand | 13. STATE: Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5555' gr.

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) Change plans			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

3/5/81 - Tenneco proposes to drill to a total depth of 5700', rather than 5325' as was specified on the application for Permit to Drill to the above referenced well.

APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING
DATE: 3-27-81
BY: M. J. Munder

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Asst.Div.Adm.Mgr. DATE March 6, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
PO Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL, 1425.8' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sulphur Canyon Unit USA

9. WELL NO.
1-15

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T18S, R23E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5553' gr.

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐	☒	
FRACTURE TREAT	☐	☐	
SHOOT OR ACIDIZE	☐	☐	
REPAIR WELL	☐	☐	
PULL OR ALTER CASING	☐	☐	
MULTIPLE COMPLETE	☐	☐	
CHANGE ZONES	☐	☐	
ABANDON*	☐	☐	
(other)			

RECEIVED
APR 7 1981
DIVISION OF
OIL, GAS & MINING

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

2/27/81. Drill to 1188'. Log. RU and run 30 jts (1192.86') 7" 23# csg. Shoe @ 1188'. Cmt. w/150 sx POZ w/10% salt, 2% $CACL_2$, 1/4#sk Celloflake. Tail in w/50 sx Class B and 1/4#/sk Celloflake. Circ 5 bbls to surface. Plug down. NUBOP's. Set slips. NUWH.
2/28/81. LDDC. Pressure test to 1500 PSI. TIH. Drill cmt. Dry up, drill ahead. Weld blooie line.
3/4/81. Check BOP's. Change rotating head rubber, mist drilling. Trip for bit. Wash to bottom. Blow hole, 10' trip flare @ 4815'. Wet @ 4800'.
3/5/81. Drill to 5140'. Unable to unload hole w/compressors. Pull up bit to 7" csg. Mud up. NU flowline for mud drilling.
3/13/81. Drill to TD @ 5550' 3/12/81. Log well. TIH. Circ and cond. TOOH. RU and run 122 jts. (5542') 4-1/2" 10.5# csg - Shoe @ 5544'. Cmt w/175 sx Self Stress w/additives. Release rig 3/13/81.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE Asst.Div.Adm.Mgr. DATE 3/23/81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☐ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
Box 3249, Englewood, Co 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL, 1425' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U - 33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sulpher Canyon Unit USA

9. WELL NO.
1-~~16~~ 15

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T18S, R23E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5555' ground

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

3/31/81 MIRUSU

4/1/81 RIH and tagged PBTD @ 5476' w/ 2 3/8" tbg. Circ'd hole clean w/ 3% KCL water. Pressure test csg to 4000 PSI. Held OK. Swabbed flow down to 4700'. POOH w/ tbg. Perf'd Morrison from 5182-86' @ 2 JSPF. RIH w/ tbg to 5220'.

4/2/81 SITP: 0 PSI SICP: 0 PSI. Swabbed well and recovered 5 bbls fluid. No gas entry. POOH w/ tbg. RIH w/ tbg and pkr. Set pkr @ 5096'.

4/3/81 Acidized Morrison w/ 200 gals 7½% HCL. AIP: 3200 PSI, AIR: 3½ BPM, ISIP: 1250PSI 15 min SIP: 800 PSI. Made 10 swab runs and recovered 22 bbls fluid. No gas show. POOH w/ tbg.

4/4/81 SICP: 0 PSI. RIH w/ wireline and found fluid level @ 4400'. Perforated Dakota: 4694-4726' and 4854-72', RIH w/ tbg, pkr and retrieveable bridge plug. Set RBP @ 4779'. Swabbed well dry. Pulled up and set pkr @ 4616'. No gas flow. RIH w/ pressure bombs to 4718'. Shut well in for buildup.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Carley Watkins TITLE Asst.Div.Adm.Mgr. DATE April 15, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

APR 24 1981

DIVISION OF
OIL, GAS & MINING

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
Box 3249, Englewood, Co 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL 1425.8' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U - 33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sulpher Canyon Unit USA

9. WELL NO.
1-~~16~~ 15

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T18S, R23E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5555' ground

RECEIVED
APR 24 1981
DIVISION OF
OIL, GAS & MINING

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐***	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Swabbing		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

4/8/81 SITP: 0 PSI. Release pkr. POOH w/ 2 3/8" tbg and pkr. Run fishing tool. Caught fish. POOH. RIH w/ 2 3/8" tbg and pkr. Set pkr @ 4616'. Swab to test zone 4694-4726'. 150' of fluid in hole. Recover ½ bbl water on second run. Moved bridge plug to 4943' and pkr to 4760'. Isolated zone 4854-72'. Made 2 swab runs. 350' fluid in hole. Swabbed dry shut-in for three hours. Approx. 1bbl in 3 hours. Had flare ahead of swab.

4/9/81 SITP: 0 PSI. Made 1 swab run. Fluid level @ 1800'. Recovered 8bbls water. Acidize Lower Dakota 4854-72', w/ 1000 gals 7½% MSR acid and 36 ball sealers. AIR: 3 BPM AIP: 1700 PSI ISIP: 1000 PSI, 15 min SIP: 150 PSI. Made 17 swab runs. Recovered 43 bbls acid water. Shut down for 4.2 hours.

4/10/81 SITP: 0 PSI SICP: 0 PSI. Fluid level @ 2000'. Made 8 swab runs. Recovered 10 bbls water shut down 3 hrs. 500' of fluid in tbg. Recovered 2bbls. Shut down 5 hrs, 1000' of fluid in tbg.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Carley Watkins TITLE Asst.Div.Adm.Mgr. DATE April 15, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☐ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
Box 3249, Englewood, Co 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL, 1425' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U - 33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sulpher Canyon Unit USA

9. WELL NO.
1-~~16~~ 15

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T18S, R23E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5555' ground

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☒
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other)			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

3/31/81 MIRUSU

4/1/81 RIH and tagged PBTD @ 5476' w/ 2 3/8" tbg. Circ'd hole clean w/ 3% KCL water. Pressure test csg to 4000 PSI. Held OK. Swabbed flow down to 4700'. POOH w/ tbg. Perf'd Morrison from 5182-86' @ 2 JSPF. RIH w/ tbg to 5220'.

4/2/81 SITP: 0 PSI SICP: 0 PSI. Swabbed well and recovered 5 bbls fluid. No gas entry. POOH w/ tbg. RIH w/ tbg and pkr. Set pkr @ 5096'.

4/3/81 Acidized Morrison w/ 200 gals 7½% HCL. AIP: 3200 PSI, AIR: 3½ BPM, ISIP: 1250PSI 15 min SIP: 800 PSI. Made 10 swab runs and recovered 22 bbls fluid. No gas show. POOH w/ tbg.

4/4/81 SICP: 0 PSI. RIH w/ wireline and found fluid level @ 4400'. Perforated Dakota: 4694-4726' and 4854-72', RIH w/ tbg, pkr and retrieveable bridge plug. Set RBP @ 4779'. Swabbed well dry. Pulled up and set pkr @ 4616'. No gas flow. RIH w/ pressure bombs to 4718'. Shut well in for buildup.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Carley Watkins TITLE Asst.Div.Adm.Mgr. DATE April 15, 1981
Carley Watkins

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

APR 24 1981

*See Instructions on Reverse Side

DIV. OF OIL, GAS & MINING

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
Box 3249, Englewood, Co 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 712.2' FSL 1425.8' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U - 33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sulpher Canyon Unit USA

9. WELL NO.
1-~~10~~ 15

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T18S, R23E

12. COUNTY OR PARISH | 13. STATE
Grand | Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5555' ground

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐***	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Swabbing		

APR 24 1981

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

DIVISION OF
OIL, GAS & MINING

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

4/8/81 SITP: 0 PSI. Release pkr. POOH w/ 2 3/8" tbg and pkr. Run fishing tool. Caught fish. POOH. RIH w/ 2 3/8" tbg and pkr. Set pkr @ 4616'. Swab to test zone 4694-4726'. 150' of fluid in hole. Recover ½ bbl water on second run. Moved bridge plug to 4943' and pkr to 4760'. Isolated zone 4854-72'. Made 2 swab runs. 350' fluid in hole. Swabbed dry shut-in for three hours. Approx. 1bbl in 3 hours. Had flare ahead of swab.

4/9/81 SITP: 0 PSI. Made 1 swab run. Fluid level @ 1800'. Recovered 8bbls water. Acidize Lower Dakota 4854-72', w/ 1000 gals 7½% MSR acid and 36 ball sealers. AIR: 3 BPM AIP: 1700 PSI ISIP: 1000 PSI, 15 min SIP: 150 PSI. Made 17 swab runs. Recovered 43 bbls acid water. Shut down for 4.2 hours.

4/10/81 SITP: 0 PSI SICP: 0 PSI. Fluid level @ 2000'. Made 8 swab runs. Recovered 10 bbls water shut down 3 hrs. 500' of fluid in tbg. Recovered 2bbls. Shut down 5 hrs, 1000' of fluid in tbg.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Carley Watkins TITLE Asst.Div.Adm.Mgr. DATE April 15, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

15

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Sulphur Canyon Unit USA

9. WELL NO.: 1-15 (Formerly Birch #1-16)

10. FIELD AND POOL, OR WILDCAT: Wildcat Entrada

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Section 1, T18S, R23E

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Tenneco Oil Company

3. ADDRESS OF OPERATOR: Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 712.2' FSL, 1425.8' FEL
At top prod. interval reported below
At total depth

14. PERMIT NO.: 43-019-30772 DATE ISSUED: 1/30/81

12. COUNTY OR PARISH: Grand

13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
1/3/81	3/12/81	5/5/81	5555' gr.	--

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5550'	4830'		→	0'-TD	--

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4694-4726' Dakota

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: SNPL, ACB/GR, DI/SFL, CNFD, CFDL

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
14"	Conductor	31'	24"	10sx Portland 90 sx Redicrete	
7"	23#	1188'	8-3/4"	150sx 50/50 POZ; 50sx CL-B	
4-1/2"	10.5#	5549'	6-1/4"	175sx Self Stress	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4743'	

31. PERFORATION RECORD (*Interval, size and number*)

4854-4872' 50' 100 holes
4694-4726' 2 JSPF
5182-5186' 4' 8 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4694-4726'	600 gals 7½% MSR 64 ball sealers
	79,800 gals 70% qual. foam,
	100,800# 20/40 sand
	Cast iron bridge plug @ 4830'

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
5/5/81	Flowing	Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5/5/81	24 hrs.	½" orifice			260		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
42 PSI	75 PSI			260		

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Sold

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: Electric logs forwarded by Schlumberger and OWP.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Asst. Div. Adm. Mgr. DATE 5/7/81

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Castlegate	1130'	1188'	Sand, water
Dakota	4685'	4728'	Sand, gas with water
	4766'	4818'	Sand, gas with water
	4853'	4871'	Sand, water
Morrison- Salt Wash	5180'	5157'	Sand (limy), water
	5200'	5239'	Sand (limy), water
	5301'	5310'	Sand (limy), water
Entrada	5459'	To T.D.	Sand, water

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Mesaverde	Surface	
Sego	988'	
Castlegate	1130'	
Mancos B Zone	1780'	
Base "B" Zone	2688'	
Frontier	4329'	
Dakota Silt	4581'	
Dakota Sand	4678'	
Morrison	4872'	
Salt Wash	5109'	
Entrada	5459'	
Total Depth	5550'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

GPO 680-147

Form 9-330
(Rev. 5-63)

Amended

Form approved.
Budget Bureau No. 42-R355.5.

15

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

7. UNIT AGREEMENT NAME: Sulphur Canyon Unit USA

8. FARM OR LEASE NAME:

2. NAME OF OPERATOR: Tenneco Oil Company

9. WELL NO.: 1-15

3. ADDRESS OF OPERATOR: P.O. Box 3249, Englewood, CO 80155

10. FIELD AND POOL, OR WILDCAT: Wildcat Entrada

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 712.2'FSL, 1425.8'FEL
At top prod. interval reported below
At total depth

RECEIVED
MAY 18 1981
DIVISION OF OIL, GAS & MINING

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Section 1, T18S, R23E

14. PERMIT NO. | DATE ISSUED: 1/30/81 | 12. COUNTY OR PARISH: Grand | 13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
1/31/81	3/12/81	4/17/81	5555' gr.	-

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5550'	4830'		→	0'-TD	-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4694-4726' Dakota

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: SNPL, ACB/GR, DI/SFL, CNFD, CFDL

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
14"	Conductor	31'	24"	10sx Portland 90sx Redicrete	
7"	23#	1188'	8 3/4"	150sx 50/50 POZ; 50sx CL-B	
4½"	10.5#	5549'	6¼"	175sx Self Stress	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	4743'	

31. PERFORATION RECORD (*Interval, size and number*)

4854-4872' 50' 100 holes
4694-4726' 2 JSPF
5182-5186' 4' 8 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4694-4726'	600 gals 7½% MSR 64 ball sealers
	79,800 gals 70% qual. foam,
	100,800# 20/40 sand
	Cast iron bridge plug @ 4830'

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
4/15/81	Flowing	Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
4/17/81	24 hrs.	½" orifice			260		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
42 PSI	75 PSI			260		

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): To be sold on pipeline connection

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: Electric logs forwarded by Schlumberger and OWP.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Carley Watkins TITLE Asst. Div. Admn. Mgr. DATE May 15, 1981
Carley Watkins

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

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Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Castlegate	1130'	1188'	Sand, water
Dakota	4685'	4728'	Sand, gas with water
	4766'	4818'	Sand, gas with water
	4853'	4871'	Sand, water
Morrison- Salt Wash	5180'	5157'	Sand (limy), water
	5200'	5239'	Sand (limy), water
	5301'	5310'	Sand (limy), water
Entrada	5459'	To T.D.	Sand, water

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Mesaverde	Surface	
Sego	988'	
Castlegate	1130'	
Mancos B Zone	1780'	
Base "B" Zone	2688'	
Frontier	4329'	
Dakota Silt	4581'	
Dakota Sand	4678'	
Morrison	4872'	
Salt Wash	5109'	
Entrada	5459'	
Total Depth	5550'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

GPO 680-147

Form 3160-5
November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME: Sulphur Canyon Unit USA

2. NAME OF OPERATOR: Tenneco Oil Company

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: P. O. Box 3249, Englewood, CO 80155

9. WELL NO.: 1-15

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 712.2 FSL, 1425.8 FEL

10. FIELD AND POOL, OR WILDCAT: Wildcat Entrade

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T18S, R23E

RECEIVED
AUG 8 1984
DIVISION OF OIL GAS & MINING

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5555' GR

12. COUNTY OR PARISH: Grand

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Tenneco requests permission to plug and abandon the referenced well according to the attached detailed procedure.

Note:
Federal approval of this Procedure is required prior to performing work.

ACCEPTED
~~APPROVED~~ BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 8/13/84
BY: John R. Baza

18. I hereby certify that the foregoing is true and correct

SIGNED Scott McKinney TITLE Senior Regulatory Analyst DATE 7/30/84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

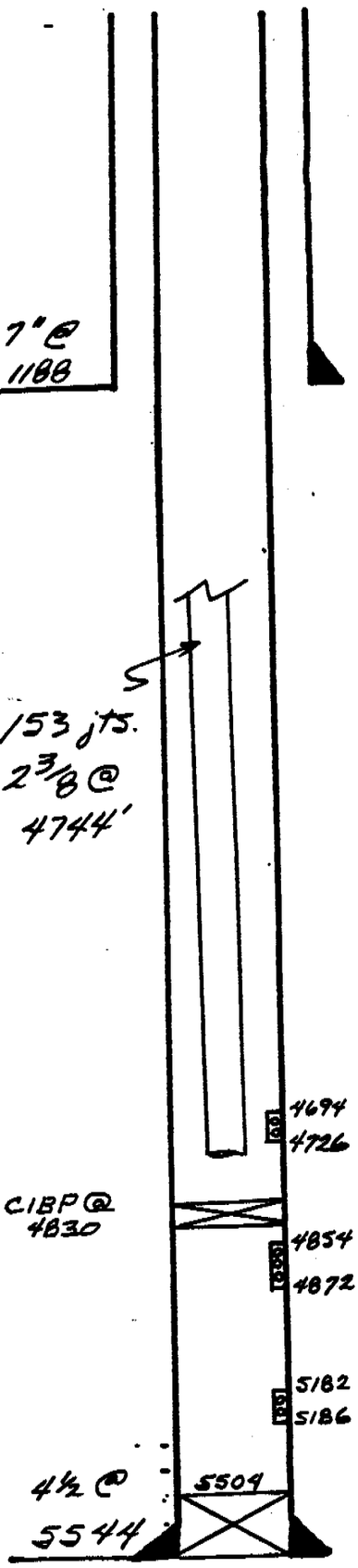
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

LEASE Sulphur Canyon

WELL NO. 1-15

7 "OD. 23 LB. K-55 CSG. W/ 200 SX

TOC @ SURFACE.



4½ "OD. 10.5 LB. K-55 CSG. W/ 175 SX

TOC @ 4480 (BOND LOG).

DETAILED PROCEDURE

1. MIRUSU. Blow well down. NDWH. NUBOP.
2. POOH w/ TBG. RIH w/ BAKER CMT. RET. AND SET @ 4600'. LOAD BACKSIDE & PT RET. TO 500 psi. PU TBG & PT to 2000 psi. STING OUT OF RET. AND ESTABLISH REVERSE CIRC. Sting into RET. AND EST. RATE into PERFS.
3. PUMP 50 SK CLASS G NEAT. DISPLACE CMT to RET. STING OUT. PULL 1 STAND AND REVERSE TBG CLEAN.
4. DISPLACE HOLE w/ 9 ppg MUD. POOH.
5. MIRU WL UNIT. Chem. CUT CSG AT 4400'.
6. RU CSG CREW. PULL and lay dn 4½
7. RIH w/ 2 3/8 to 100' below 4½ STUB. spot 50 sk plug ACROSS STUB.
8. PU to 1300' AND spot 50 sk plug at 7" SHOE
9. PU to 300' AND CIRC. CMT to SURFACE (Approx. 50 SK).
10. CUT OFF CASING HEAD AND SET P&A MARKER.
11. FILL pits AND clean location.

CLG = 1.15 CuFT/SX
= 4.9 SX/bbl

4½ = .016 bbl/ft.
6¼ = .038 bbl/ft.
7" = .039 bbl/ft.

....4

FOX

Form 3160-5
November 1983)
Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.: U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
SEP 14 1984
DIVISION OF OIL GAS & MINING

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME: Sulphur Canyon Unit USA

2. NAME OF OPERATOR: Tenneco Oil Company

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: P. O. Box 3249, Englewood, CO 80155

9. WELL NO.: 1-15

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 712.2' FSL, 1425.8' FEL

10. FIELD AND POOL, OR WILDCAT: Wildcat Entrade

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T18S, R23E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5555' GR

12. COUNTY OR PARISH: Grand

13. STATE: UT

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	X
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

09/03/84: MIRU equip. RU.

09/04/84: Blow well dn, POOH w/153 jts 2-3/8" O.D. tbg. TIH w/retainer on 2-3/8" tbg. Set retainer @4600' in 4-1/2" csg. Fill BS w/H_2O, test retainer to 500 psi & tbg to 2000#, o.k. Sting into retainer, brk dn pers w/1500# @ 3 BPM. Pump 50 sxs Class "G" cmt thru retainer. Sting out. Dump 5 sxs cmt on top of retainer.

09/05/84: Install BOP's. Worked 4-1/2" csg. Freepoint 4-1/2" csg @3925'. Cut 4-1/2" csg @3925'. Pull & lay dn 86 jts plus 1 - cutoff jt 4-1/2" csg.

09/06/84: Pull to 3920; plug 6-1/4" hole w/50 sxs Class "G" cmt. (Est top cmt = 3640') per BLM Rep Bob Graph. TIH to 1175' on 2-3/8" tbg, attempt, but unable to set retainer. TIH w/2-3/8" tbg openended to 1300'. Set 75 sxs Class "G" plug w/2% $CaCl_2$. (Est. TOC = 920'). Pull to 300' fill to surface w/Class "G" cmt w/2% $CaCl_2$. N/D BOP's, cut off csg head install dry hole marker, R/D.

ACCEPTED
~~APPROVED~~ BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 9/17/84
BY: John R. Baza

18. I hereby certify that the foregoing is true and correct

SIGNED Scott McKinney TITLE Sr. Regulatory Analyst DATE 9/12/84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
November 1983)
Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.: U-33106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
OCT 02 1985
DIVISION OF OIL
GAS & MINING

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME: Sulphur Canyon Unit USA

2. NAME OF OPERATOR: Tenneco Oil Company

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: P. O. Box 3249, Englewood, CO 80155

9. WELL NO.: 1-15

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 712.2' FSL, 1245.8' FEL

10. FIELD AND POOL, OR WILDCAT: Entrade Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T18S, R23E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5555' GR

12. COUNTY OR PARISH: Grand

13. STATE: UT

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANE	☐	(Other) Restoration			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The referenced well was reclaimed on August 19, 1985 and reseeded September 5, 1985 per BLM guidelines the location was inspected and approved by BLM representative, Jeff Robbens on September 5, 1985.

18. I hereby certify that the foregoing is true and correct

SIGNED Scott McKinney TITLE Senior Regulatory Analyst DATE September 27, 1985

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

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